

- I. *A Letter from the Rev^d Mr. John Clayton, (afterwards Dean of Kildare in Ireland) to Dr. Grew, in Answer to several Queries relating to Virginia, sent to him by that learned Gentleman, A. D. 1687. * communicated by the Right Reverend Father in God Robert Lord Bishop of Corke, to John Earl of Egmont, F. R. S.*

— I Have observed many grofs Mistakes in Peoples Notions of *Virginia*, when discoursing of the Natives, which have risen from the want of making a Distinction in their Expressions, when they speak of the *English* or *Whites*, born there, and so called *Natives*; and the *Aborigines* of the Country. Please therefore to take Notice, that when I speak of the Natives in general, I mean only the *Indians*.

As therefore to your first Query: Their *Wiocbist*, that is, their Priest, is generally their Physician; and is a Person of the greatest Honour and Esteem among them, next to the King, or to their great War-Captain.

2. Nature is their great Apothecary, each Physician furnishing himself, according to his Skill, with Herbs, or the Leaves, Fruit, Roots, or Barks of Trees; of which he sometimes makes use of the Juice, and sometimes reduces them into Powder, or perhaps makes a Decoction thereof.

3. Though every one, according to his Skill, is a sort of Doctor, (as many Women are in *England*

* This may serve as a Sequel to the Accounts of *Virginia* formerly given by Mr. Clayton. See these *Transactions*, N^o 201. 205. 206. 210.

yet their Priest is peculiarly stiled their Physician, to be consulted upon greater Emergencies. The Rules of the Descent hereof, as to Families, I do not know ; for they are a sullen close People, and will answer very few Questions.

4. They reward their Physician with no certain Fees, but according as they bargain for *Wampaupeake* Skins, or the like. If it be to an *Englishman* they are sent for, they will agree for a Match-coat, a Gallon or two of Rum, or so-forth, according to the Nature of the Cure. Sometimes the Priest will sell his Remedy ; for some of them have told me, that they have bought the Root which cures the Bite of the Rattle-snake from their *Wiotchist*.

5. Their King allows no Salary, that ever I heard of ; but every one that in any Nature can serve his Prince, is ready to do it, and to do it *gratis*.

6. They have no Consultations, their Practice being merely empirical. They know little of the Nature or Reason of Things. Ask them any Question about the Operation of a Remedy, and, if in good Humour, perhaps they will reply, *It cures* ; otherwise, they will shrug their Shoulders, and you may ask forty Questions, and not know whether they understand either the Thing, or what it is that you say to them.

7. They pay a certain Deference of Honour to their Priest or *Wiotchist*, whose Person they hold sacred ; but Laws they have none (as far as I could ever learn) that binds them thereto : In general, the Will of their Prince stands for Reason and Law.

8. The Means whereby they convey their Art to Posterity, I take to be this: They lodge in their
Wiotchisan

Wiochisan Houses, *i. e.* their Temples, certain kinds of Reliques, such as Mens Skulls, some certain Grains or Pulse, and several Herbs, which are dedicated to their Gods; *viz.* The Skulls in Memory of their Fights and Conquests; the Pulse by way of Thank-offering for their Provisions; and the Herbs upon the same Account, for some special Cure performed thereby. For when any one is cured by any Herb, he brings Part thereof, and offers it to his God; whereby the Remembrance of this Herb and its Virtue is not only preserved, but the Priest also becomes best instructed thereby, and knowing in the Art of Medicine: For otherwise, they are mighty reserved of their Knowledge, even among themselves. Whether the Priest takes certain Persons to instruct, or reaches only his own Children, I know not. Often when they are abroad hunting in the Woods, and fall sick, or come by any Hurt, they then are forced to make use of any Herbs which are nearest at Hand, which they are not timorous in venturing upon, though they know not the Virtue or Qualities thereof. And thus, by making many Trials and Experiments, they find out the Virtues of Herbs; and by using simple Remedies, they certainly know what it is that effects the Cure.

9. They are generally most famed for curing of Wounds, and have indeed various very good Wound-herbs, as an Herb commonly called *Indian-weed*, which perhaps may be referred to the *Valerians*, and be said to be *Platani foliis*. They use also the *Gnaphalium Americanum*, commonly called there *White Plantain*. As to our *Plantain*, or the *Heptapleuron*, they call it the *Englishman's-foot*, and have a Tra-

dition, that it will only grow where they have trodden, and was never known before the *English* came into this Country. The most famous old Physician among the *Apomatick Indians*, as I was informed by a Person of a very good Understanding, used mostly an Herb which he shewed me, whose Leaf is much like *Self-heal* in Winter. I observed it was red underneath, and would at length appear tinged on the upper Side also: It makes a good Salve, only it fills a Wound too fast with Flesh. I took a Draught of this Herb, along with some others, which I have left in the North of *England*. The great Success they have in curing Wounds and Sores, I apprehend mostly to proceed from their Manner of dressing them: For they first cleanse them, by Sucking, which, though a very nasty, is, no doubt, the most effectual and best way imaginable; then they take the *biting Persicary*, and chew it in their Mouths, and thence squirt the Juice thereof into the Wound, which they will do as if it were out of a Syringe. Then they apply their Salve-herbs, either bruised or beaten into a Salve with Grease, binding it on with Bark and Silk-grass. Colonel *Spencer*, the present Secretary of State of *Virginia*, told me of a very strange and extraordinary Cure performed by an *Indian*, on one of his *Negroes*. The *Negro* was a very good Servant, wherefore his Master had valued him much; but by Degrees he grew dim-sighted, and was troubled with terrible Pains in his Eyes, so that with one he could see but a little, and none at all with the other; and as the Pain still increased, the Colonel was greatly apprehensive, lest his *Negro* would be quite blind. Several Surgeons were sent for,

for, who had tried to cure him, but in vain ; when an *Indian*, coming to the House, said he would cure him ; they told Mr. Secretary thereof, who sent for the *Indian*, and agreed with him for two Quarts of Rum. The *Indian* told him, that he could save one Eye, but that the *Negro* would be blind of the other. The next Morning the *Indian* went a hunting into the Woods for his Herbs, and returned with them about Noon, which he bruised, putting thereto a little Water ; and having pressed forth some of the Juice, he dropped some thereof into the Eye which he said would be blind, and laid the Herbs thereon, which he would have bound fast with Bark ; but the Colonel called for some Linen Rags, and had it bound up therewith. He then intimated to the Colonel, that shortly after Sun-set the *Negro* would be mad, if his Medicine took Effect, but would come to himself again before Morning ; wherefore strict Orders were given, that he should be well attended, and that nothing should be altered, let what would happen. All things therefore being accordingly done as the *Indian* had directed, every thing succeeded likewise as the *Indian* had foretold. Then, about 11 o'Clock the next Day, the Binding being removed, and the Herbs taken off from the Eye, the *Indian* bid the *Negro* hold down his Head, which when he had done, out-dropped the Cry stalline and aqueous Humours. The *Indian* afterwards bound it up again, and by Degrees the *Negro* was freed from his Pain, and had perfect Sight with the other Eye. What the Herbs were, the Colonel could never learn from him, though he proffered him whatever he would demand.

10. The Distempers amongst the *English* Natives (for I cannot give so particular an Account of the Distempers most predominant among the *Indians*) are, *Scorbutical Dropsies, Cachexies, Lethargies, Seasonings*, which are an intermitting Fever, or rather a continued Fever with quotidian Paroxysms. These are now rarely sharp, but shew themselves in a lingering Sickness. The *Gripping of the Guts* mostly dry, and when the *Tormina Ventris* cease, they generally shoot into the Limbs, and fix there, in a terrible sort of Gout, taking away the Use of the Limbs. Thus they will pine away to Skin and Bone, so that their Joints will seem dislocated, and their Hands utterly crippled. *Sore Throats*, which the last Year were very frequent, and deemed infectious, running generally through whole Families, and, unless early prevented, became a cancerous Humour, and had Effects like the *French-pox*. Likewise *Pains in the Limbs*, which I apprehend to have proceeded partly from the same Humour floating up and down the Body. These Pains are very exquisite, mostly nocturnal; for while they walk, if they have the Use of their Limbs, they feel the least Pain. The Oil of a Fish called a *Drum*, was found very effectual to cure these Pains, and restore the Limbs. I was Eye-witness when a very worthy Gentlewoman, who had lost the Use of her Limbs, was intirely recover'd by the Use of this Medicine: For her Feet being anointed with this Oil, the Pains flew into her Head; her Head thereupon being anointed, the Pain descended again; then anointing both Head and Feet, she was recover'd. There are three sorts of Oils in that Country, whose Virtues, if fully proved, might
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not perhaps be found despicable : The Oil of *Drums*, the Oil of *Rattle-snakes*, and the Oil of *Turkey Bustards*. The Oil of *Sassafras-leaves* may be deservedly consider'd too, for they will almost intirely dissolve into an Oil. But to return : There is another sort of Distemper, which I judge to be the *Lepra Græcorum*. And it may perhaps be no bad Conjecture, that this chiefly proceeds from their feeding so much as they do, on a delicate luscious sort of Pork. Among the *Indians* they have a Distemper which they call the *Taws*, which is nearly related to the *French-pox*; which they are said to cure with an Herb that fluxes them : But this I have only by Hear-say.

11. The *Indians* mind neither the Pulse nor Urine, only judge by the common most remarkable Symptoms; and some pretend to form a Judgment from the Countenance, and are fond of being thought Physiognomists.

12. I never could find, that they practised the *letting of Blood*. They purge much with several sorts of Roots of their own Country Growth, and vomit frequently with various Herbs. They sweat boldly and excessively, and after a very strange manner : For they have their Sweating-stoves always upon the Bank of some River; whence they rush forth in the Height of their Sweat, and run into the River, where they wash and bathe themselves very plentifully. They use no *Blistering-plasters*, but are exquisite at Cupping. As the *East-Indians* use *Moxa*, so these burn with *Punk*, which is the inward Part of the Excrecence or Exuberance of an *Oak*. When they design to give a *Purge*, they make use of the following

ing Herbs: *Poake-root*, i. e. *Solanum bacciferum*, a strong Purge, and by most deemed Poison. The Roots of *Tythimal*, of which I have observed two sorts; the one *Flore minimo herbaceo*, the other *Flore albo*. The Flower of this last is small, but large in Comparison with the other: They are *repentes*, and grow in old manured Grounds. They chiefly make use of the latter of these, and it is a most excellent Purge, though it sometimes vomits: It is a quick, but moderate Worker enough; and has this Peculiarity, that it opens the Body in the *Gripes*, when other much violenter Purgatives will not move it. There is another Herb, which they call the *Indian Purge*: This Plant has several woody Stalks growing near three Feet tall, and, as I remember, *perfoliat*: It bears yellow Berries round about the Joints: They only make use of the Root of this Plant. They use also the *small Fleur de Lis*, whose Virtues, I believe, are not yet half known, for it has some extraordinary Qualities: It does not grow above a Hand high, flowers in *March*, and is very fragrant. They use also some sort of the *Apocynum's*; particularly that which I think *Gerard* calls *Vincetoxicum Americanum*; for there are several sorts of *Apocynum's*, I think 13 or 14, but they are not all purgative: For having got some of the Root from an *Indian*, which he assured me was the *Rattle-snake-root*, I thought the Root of an *Apocynum* (which may well be distinguished by that of *Rosæ Mariæ foliis*) was very like it, both in Shape and Taste, considering the one dried, and the other fresh: Wherefore I got some Quantity thereof, and carrying it in my Pocket, I ventured to eat thereof, little by

by little, till I believe I have taken a Drachm at a time, to observe if it had any peculiar Operation on the Body ; but could never find, that it had.

They have likewise several sorts of Herbs, where-with they *vomit* ; one of which is a little sort of *Squills*. They likewise take the Leaves of a certain curious odoriferous Shrub, that grows in the Swamps, which I take to be the *lesser Sassafras* ; they bruise them in Water, and then express the Juice, which they drink warm. The *Indian* Interpreter, who taught me this, prized it much, as excellent Physic, and said they found it a very sovereign Remedy. It is as odoriferous as any Shrub I ever smelt at in my Life : Whoever has once taken Notice of the Smell, cannot forget it, or be deceived therein afterwards, having something peculiar in it. The Name which the *Indian* gave me hereof was *Wisochis*, which since I understand is the general Word for Physic.

13. The rest of their *Materia Medica* consists of Herbs, of which they have great Plenty, and seldom prescribe any thing else. I have collected above 300 several sorts, that were no *European* Plants ; but I shall only mention those at present, whose Virtues I take to be most remarkable. And first, the *Sassafras-tree*, whose Root is well enough known. It shoots forth its Blossoms in *March*, which are yellow, and grow in little Bunches like Grape-flowers, and which, when gathered and picked from the husky Bud, make a curious Preserve. Most *Sassafras-trees* blossom, few bear Berries, but those that do are generally very thick : They are shaped much like those of *Dulcamara*, but are black of Colour, and very *aromatic* ; I take them to have considerable Virtues.

The *Gum-tree*, which I refer to the Species of *Plane-trees*, and distinguish it by its Fig-like Leaf, only more sharply dented. Its Leaf smells much like a Lemon. Their Practice is to beat the Tree, and then pill off the Bark, and so scrape the Gum, which has Virtues like Turpentine, or rather more astringent and drying. This they usually mix with their common Turpentine, which is whiter and more Butter-like, than the *Venice* or *Chios* Turpentine. *Quere*, whether better or no? The further Method of preparing this Medicine, as I am told, is this: They expose it to the Sun on Paper, where at first it rather seems to melt, but it will afterwards grow hard; they then beat it to a Powder, and administer it. They use much the young Buds of the *Populus*, *seve Tulippa arbor*, a vast large Tree, extraordinary spacious, bearing Flowers about *April*, much like Tulips; its Leaves are large, smooth, and well-shaped, which, together with the Flowers, render the Tree exceeding beautiful to behold. It bears its Seed coniferous, and is an excellent Opener of Obstructions. The *Sorrel-tree* bears a Leaf something like a Laurel, in Taste much resembling *Lujula*. They use it in Fevers, and, as I am informed, with good Success. This Tree grows plentifully on the South-side of *James River* in *Virginia*; I cannot say I ever found it to the Northward. The *Swamp-plum-tree*, whose Wood they calcine, and make into Charcoal, which they beat to a Powder, then mix it with Grease, and make an Ointment thereof, with which they anoint the Body, and foment it very much, whereby they cure the *Dropsy*; for it opens the Pores to that Degree, that the Water runs down their Legs. Among
their

their Herbs, I have had 40 several Sorts, or near that Number, shewed me as great Secrets, for the *Rattle-snake-root*, or that kind of *Snake-root* which is good for curing the Bite of the *Rattle-snake*: But I have no Reason to believe, that any of them are able to effect the Cure. One Gentleman shewed me a certain Root, which was a *Smilax*, and assured me, that that was certainly the *Rattle-snake-root*. And afterwards, when I shewed Mr. Secretary *Spencer* the same Root, he said that certain *Indians* had given him of the same Root for the *Rattle-snake-root*, and that he had some Quantity to send for *England*; but this Root is by no means the same with that which I have mentioned before, in Answer to *Quære* 12. which I said was like the Root of an *Apocynum*, which I myself obtained from an *Indian*, who seemed to prize it highly, having sewed it carefully up in Leather, on the Inside of his Belt. Others have shewed me *Chrysanthemum ferulaceis foliis* for it; others *Chrysanthemum tragopyri foliis*. Again; general Report goes in favour of the *Asarum Cyclaminis foliis*, which many therefore particularly call *Rattle-snake-root*. There are strange Stories told in favour of an Herb called *Dittany*, which however is not of the *Dittany* kind, but is only a Mountain *Calaminth*. This, they say, will not only cure the Bite of a *Rattle-snake*, but that the Smell thereof will kill the *Snake*. But however, * I have some Reason to believe, that this Herb will not cure the Bite, nor that the Smell thereof will kill the

* See *Miscel. Curiosa*, Vol. III. p. 352.

Snake; for Colonel *Spencer* assured me, that he had an Opportunity of making an Experiment thereof upon a Dog which was bitten by a *Rattle-snake*, to which he gave plentifully of the Juice of his *Dittany*, as they called it; but the Dog died nevertheless a Day or two after. And Mr. *Wormley*, one of the Council of State in *Virginia*, told me, that being in Company with another Gentleman, he had an Opportunity of making the following Experiment; for seeing a *Rattle-snake* in her Coil, they went and got a Bunch of this *Dittany*, and tied it to a Pole; then putting the *Dittany* that was thereon to the Nose of the *Snake*, it seemed to offend her, whereupon she turned away her Head, which they still followed with the *Dittany*; then the *Snake* fled, and they still pursuing her, she at last stretched herself out at Length, and lay seemingly dead. Then they laid the *Dittany* upon her Head, and went into a neighbouring House to refresh themselves; for they were tired with skipping about after the *Snake*. When they had staid near half an Hour, they returned to see their supposed dead *Snake*; but, behold! the *Snake* was fled; so that they then judged, that the *Snake* had only stretched herself out, because she had been tired with their Pursuit. I look upon it probable therefore, that some Accident of the like kind may have first given Origin to this Story; the Person who had tired the *Snake* not having regularly waited for the Event, but perhaps, to secure the Conquest, may have given the *Snake* a Stroke with a Switch upon the Back (which would have killed the *Snake* without the *Dittany*). But yet nevertheless, this Plant is of more than ordinary Virtues, and might not unprofitably

ably be used by our Physicians. It may be referred to the Class of the *Calamintha montana, pulegii odore*, which has been transferred from thence into *England*, and I think is now pretty common, but is hotter, and more sudorific.

I will now mention to you an Herb, though unknown, yet worthy to be fetched from *Virginia*, yielded the Country nothing else: It is the Herb called there *Angelica*, but which I take to be *Libanotis vera latifolia Dodonæi*. It grows generally on a rich sandy Ground, on a declining Brow, that faces the rising Sun; the Root shoots deep into the Earth, sometimes near three Feet, very tender, and easily broken, of a white or rather Cream-like Colour; and being lactescent, yields a little Milk, thick and yellow as Cream; a very early Plant. It seldom flowers or seeds under five Years Growth; for I have fully and distinctly observed that Number of Years in the several Sorts of this Plant, by the Growth of those not come to Maturity to bear Seed; and it is observable, that those which do not seed, have rarely more than one Branch, which divides when it spreads, and subdivides itself still into Three. The Leaf is much like our wild *Angelica*, only thinner, and more the Colour of a Willow-green. Those that seed, have a fistulous Stalk about the Thickness of *Dill*, a white umbelliferous Plant; the Seeds are much like *Angelica-seed*, but from the Fragrancy of the Root, and its being peculiarly bearded, I undoubtedly style it a *Libanotis*. It stops the *Flux*, and cures it to a Wonder. Again; it often loosens and purges the Bodies of those that are bound, and have the Gripes, especially if it proceeds from Cold; and prevents many
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unhappy Distempers. I have Reason to speak well of it; for it is to it, under GOD, that I attribute the saving of my own Life. I have known it give 14 or 15 Stools, whereas it will not move a Child in Health. I take it to be the most sovereign Remedy the World ever knew in the Gripping of the Guts, and admirable against Vapours. It is sudorific, and very aromatic, and will not be concealed; for wherever it is mixed, it will have the predominant Scent. It is mostly called by those who know it in *Virginia*, by the Name of *Angelica*: But shewing a Piece of the Root to a great Woodsman, to see whether he knew it, and could tell me where it grew, he seemed surpris'd to see me have thereof; and told me, that he kept an *Indian* once for some Weeks with him, because he was an excellent Woodsman, and going a hunting, (*i. e.*) shooting, they came where some of this Root grew: The *Indian*, rejoicing, gather'd some of it, but was very careful to cut off the Top of the Root, and replant it: He then asked him, Why he was so careful? Whereunto the *Indian* replied, It was a very choice Plant, and very scarce; for they sometimes travelled 100 or 200 Miles without finding any of it. He then asked him, What Use it was of? To which the *Indian* answered, You shall see by-and-by. After some time, they spied four Deer at a Distance; then the *Indian*, contrary to his usual Custom, went to Windward of them, and sitting down upon an old Trunk of a Tree, began to rub the Root betwixt his Hands; at which the Deer tossed up their Heads, and snuffing with their Noses, they fed towards the Place where the *Indian* sat, till they came within easy Shot of him; whereupon he fired at them, and killed a large

large Buck. The Truth of this Story I no further assert, than that I was told it by a Person of seeming Seriousness, who had no Inducement to tell a Lye, or impose upon me: But I have often taken Notice, that the *Indians* smell generally strong of this Herb. And I have since learned from others, that the *Indians* call it the *Hunting-root*, which makes me more inclinable to give Credence to this Story. Another Gentleman, a white Native of that Country, when I once pulled a Piece of the Root out of my Pocket to bite thereof, (for I frequently carried some of it about me) asked me, If I loved Fishing? I required, Wherefore he asked me that Question? Because, said he, you have gotten some of the *Fishing-root*. The *Fishing-root*! replied I; pray why do you give it that Name? Because, said he, when we were Boys, we used to get some of it to lay with our Baits to invite the Fish to bite. This I can say of my own Knowledge, that having one Day got some Quantity of the Root, and likewise of the Branches, to distil, the strong Scent, as I went home, palpably put me into a breathing Sweat. In the Night I was waked by a Rat, which ran over my Face, whereas I never at any other time had the like happen to me; but will not be positive to conclude, that this Root was the Cause thereof, only the precedent Relations made me reflect thereon. There is another Root of the Species of *Hyacinths*, the Leaves whereof are grass-like, but smooth and stiff, of a willow-green Colour, and spread like a Star upon the Ground; from the Middle shoots a tall long rush-like Stem, without Leaves, near two Feet high; on one Side grow little white Bell-flowers one above another: The Root is
black

black outwardly, but brown within. It is bitter, and I take it to have much the same Virtues as *Little Centaury*. Some call it *Ague-grass*, others *Ague-root*, others *Star-grass*. I have likewise been told by several, of a Root which the *Indians* cure Bruises wonderfully with; but I apprehend it is the same Root with which the *Indian* cured the *Negro's* Eye afore-mentioned; for it operates much after the same manner, according to their Relation, making the Patients mad for some Hours, if they be recoverable. It is not to be applied where the Skin is broken. They use it thus: They chew some of the Root in their Mouths, and then squirt it forth on the bruised Part, fomenting it well with their Hands; then they give a little to the Person bruised to chew, who must swallow the Juice, but spit forth the Root again, which they bind on the Part aggrieved. If the Relations I have had of Cures performed thereby, be absolutely true, the World has not yet discovered a more wonderful Remedy. I had it described to me by Colonel *Smith*, of the *Isle of Wight County*, to be like *Langue de Bœuf*, with a yellow Flower, and rough hoary Leaf, the Root yellowish, and tasted something sweetish like Liquorice. There are several others I might name, whose Virtues are by no means despicable; such as the *Chrysanthamum platani foliis*, whose Root is very useful in *old Pains*, the *Sciatica* and *Gout*. It is a large Herb, grows betwixt five and six Feet tall. There are likewise many others, which bear some Analogy to the *European* Plants, such as *Solomon's-seal*, *Wood-sage*, much better, I think, than the *English*; which the *Indians* use much for Infusions, and which they take as we do Diet-drink.

drink. *Little-Centaury*, red, white, and yellow, &c. However, I never could find above 12 or 14 Plants, which were Natives of that Country, that agreed perfectly with any of our *European* Plants, but what had some notable Differences, if they were not rather to be reckoned a distinct Genus.

13. There go Traditions of their having an Art to poison their Darts; but I could never find any solid Grounds for that Report. I have observed, that in those Countries, upon an ill Habit of Body, the least Scratch is dangerous; and that, for all the Care that can be taken to prevent it, it often turns into a very desperate ulcerous Sore. Some Herbs there are of an analogous Nature with *Hemlock*, whereof, I think, they know nothing further, than that they are to avoid them; but any Herbs, wherewith they poison their Darts, I never could hear specified. And as Persons engaged in long Marches are liable to many Accidents, which may contribute to an ill State of Health, when a slight Wound in Battle has then proved mortal; this I apprehend to have been the Cause, why the Physician has rather chosen to attribute the Death of his Patient to the Poison of the Dart, than the want of Skill in himself.

14. As to their Morals, they are simple and credulous, rather honest than otherwise, and unpractised in the *European* Art of Lying and Disimulation; but as to the brutal Passions, they are sottish and sensual as the Beasts of the Field.

15. They are almost always either eating or sleeping, unless when they go a hunting: At all Hours of the Night, whenever they awake, they go to the *Homing-pot*, that is, Maze dressed in a manner like

our pilled Wheat; or else a Piece of Venifon *barbecuted*, that is, wrapped up in Leaves, and roasted in the Embers.

16. They drink, I think, little besides *Succahannah*, that is, fair Water, unless when they can get Spirits, such as Rum, from the *English*, which they will always drink to Excess, if they can possibly get them; but do not much care for them, unless they can have enough to make them drunk; and I have heard it said, that they wonder much at the *English* for purchasing Wine at so dear a Rate, when Rum is much cheaper, and will make them sooner drunk.

17. They use *Tobacco* much, which they smoak in short Pipes of their own making, having excellent Clay, which I tried a little before I came for *England*, making Crucibles thereof, which I could not discern were inferior to the *German*. They make also neat Pots of the same Clay, which will endure the Fire for any common Uses.

18. They have no *Opium*, though in some old Fields upon *York-River*, I found Poppies perhaps of no despicable Virtue. I have been told, that in Fevers, and when their Sick cannot sleep, they apply the Flowers of *Stramonium* to the Temples, which has an Effect like *Laudanum*. I have had asserted by many, that when the Soldiers were sent over to quell the Insurrection of *Bacon, &c.* they being at *James-town*, several of them went to gather a Sallad in the Fields, and lighting in great Quantities on an Herb called *James-town-weed*, they gathered it; and by eating thereof in plenty, were rendered apish and foolish, as if they had been drunk, or were become Idiots. Dr. *Lee* likewise assured me, that the same
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Accident happened once in his own Family; but that after a Night or two's Sleep, they recovered.

19 Their *Sports* are Dancing, their *Games* are playing with Straws, which as I am not perfectly acquainted with, I find it hard to describe; I can therefore only tell you how it appears to a Looker-on: They take a certain Number of Straws, and spread them in their Hands, holding them as if they were Cards; then they close them, and spread them again, and turn them very suddenly, and seem very dextrous thereat. Their *Exercise* is Hunting, that is, Shooting with a Gun, or with Bow and Arrow, wherein they excel. Their Women work, plant the Corn, and weave Baskets or Mats.

20. Several have been very old; I cannot say, that herein there is any remarkable Difference between them and the *English* Natives. If the *English* live past 33, they generally live to a good Age; but many die between 30 and 33.

21. I have been told, that one of their famous *Wiobists* prophesied, that bearded Men (for the *American Indians* have no Beards) should come and take away their Country, and that there should none of the original *Indians* be left within a certain Number of Years, I think it was an Hundred and Fifty. This is very certain, that the *Indian* Inhabitants of *Virginia* are now very inconsiderable as to their Number; and seem insensibly to decay, though they live under the *English* Protection, and have no Violence offered them. They are undoubtedly no great Breeders.

22. Though they are sluggish by Nature, and slow of Speech, yet their Method of Expression seems

vehement and emphatical, and always attended with strong Gesticulations. They are generally well proportioned, and for the most part are rather taller than the *English*. They have all either a very dark-brown Hair, that may well be called black, or a Jet-black, all lank.

II. *An Experiment to prove, that Water, when agitated by Fire, is infinitely more elastic than Air in the same Circumstances; by the late Rev^d John Clayton, Dean of Kildare in Ireland. Communicated by the same Hand as the preceding.*

—SIR Thomas Proby having heard of a new Digester, which I contrived, had a Desire to see it, and some Experiments made therein. I had a small one, which I designed only for an inward Cylinder; this I could easily put in my Pocket: Wherefore, going to pay him a Visit at *Elton* in *Huntingdonshire*, I took it along with me; and having softened a Bone therein in a very short Space, he was desirous to know the shortest Time it was possible to soften a Bone in: I told him, I thought I could soften the Marrow-bone of an Ox in a very few Minutes, but that that Vessel was very weak, and I feared would not endure the Pressure of so violent a Heat; yet seeming desirous to have the Experiment tried, I said I was ready to venture my Vessel: Then having fixed all things right, and included about a Pint of Water,

and,